ABSTRACT

A method and apparatus for reducing the acoustic output of a computer disk drive during a load or unload operation are provided. According to the invention, a pulse train having pulse widths that vary from one pulse to the next is provided to a voice coil motor while the transducer head is being loaded to or unloaded from the surface of the disk. According to one embodiment of the present invention, a proportional term equal to the inverse of the pulse width is supplied to the controller such that, with all other inputs to the controller being equal, a pulse train having pulses of equal total power are produced. By providing pulses of varying widths, the acoustic output of the disk drive is spread among multiple frequencies, and the amplitude at any one frequency is diminished as compared to a pulse train having pulses of equal width.

J:\3123\-362\Patent Application.wpd